

The commenters also agree overwhelmingly that common carrier regulation would stifle foreign investment in U.S. MSS Above 1 GHz systems by subjecting them to the limits on equity ownership and participation in management that are set forth in Section 310(b) of the Communications Act of 1934, as amended, 47 U.S.C. § 310(b).^{152/} TRW agrees with Ellipsat and Motorola that foreign equity participation in the inherently global MSS Above 1 GHz systems will be an important financing tool for most systems, and will also be critical as a means of facilitating coordination and licensing abroad.^{153/} The Commission must not endanger the promising U.S. MSS Above 1 GHz industry through the imposition of unnecessary and inappropriate regulations.^{154/}

^{152/} See, e.g., Ellipsat Comments at 46; Motorola Comments at 67; AirTouch Comments at 5-7; TRW Comments at 155-61.

^{153/} See Ellipsat Comments at 46; Motorola Comments at 67; AirTouch Comments at 5-7; TRW Comments at 155-61.

^{154/} The Commission should not be misled by AMSC's call for "regulatory parity" with non-geostationary systems. See AMSC Comments at 16 & n.21. The common carrier regulation that the Commission has chosen to impose on AMSC is justifiable, in that AMSC has a monopoly in its designated bands and is authorized to provide space segment capacity directly to end users through its own earth stations. As monopoly conditions will not exist in the MSS Above 1 GHz, and as system licensees who provide space segment capacity to service providers will not serve end users directly, common carrier regulation of such provision of capacity is not justifiable.

2. Specific Commission Approval Should Not Be Required For The Provision Of Space Segment Capacity To Parties Other Than End Users On A Non-Common Carriage Basis.

TRW agrees with LQP that the present wording of Section 20.9(a)(10) of the Commission's Rules is confusing, in that it could be interpreted to require specific Commission approval for the non-common carrier treatment of every instance in which an MSS Above 1 GHz satellite system licensee provides space segment capacity to a commercial mobile radio service provider.^{155/} As LQP observes, the Commission did not adopt such an authorization procedure for other mobile services.^{156/} TRW agrees that to do so here would be inequitable, and would also impose a heavy administrative burden on the Commission and impede standard commercial transactions that will be the lifeblood of MSS Above 1 GHz satellite system licensees. TRW therefore supports LQP's proposed re-wording of Section 20.9(a)(10).^{157/}

3. The Commission Should Not Adopt A Capacity Set-Aside For Non-Profit Organizations.

In its NPRM, the Commission asked whether it should require MSS Above 1 GHz licensees to make available a percentage of their system capacity for use

^{155/} See LQP Comments at 101.

^{156/} See id.

^{157/} See id.

by non-profit organizations, e.g., for environmental monitoring or educational purposes.^{158/} Those favoring such a requirement were instructed to provide "an analysis of the utility of MSS Above 1 GHz systems to provide these services and an analysis of the existing systems used to provide these services, including their costs."^{159/}

In response to the Commission's suggestion, several members of the public broadcasting community filed comments requesting that the Commission require licensees to offer preferential rates to public service organizations, including public broadcasters and other educational service providers.^{160/} While TRW believes in the worthiness of the goals embodied in the Commission's initial proposal and supports the aspirations expressed in the responsive comments, it is evident from these submissions that imposition of a requirement for preferential rates at this juncture would be premature, at best, and of very questionable legality.

Specifically, none of the commenters has adequately addressed the Commission's request for detailed analysis of the current systems employed to provide such telecommunication services used by public broadcasters, let alone the potential

^{158/} See NPRM, 9 FCC Rcd at 1138 (¶ 87).

^{159/} Id.

^{160/} See Joint Comments of the Association of America's Public Television Stations ("APTS") and the Public Broadcasting Service ("PBS") at 3; Comments of the Corporation for Public Broadcasting ("CPB") at 4; Comments of National Public Radio ("NPR") at 3.

suitability of MSS systems to augment these current transmission means. As APTS and PBS noted:

It is difficult to analyze the potential cost savings of utilizing a wireless service, such as MSS Above 1 GHz, over other systems capable of carrying interactive voice and data communications. The types of wireless technologies that may emerge as predominant and the costs for equipment and service are far from clear.^{161/}

Thus, in the absence of the analysis requested in the NPRM, there is no basis upon which the Commission could impose the sort of mandate sought by the APTS, CPB, PBS and NPR, and such measures should not be further considered in this proceeding.

To the extent that the Commission may ultimately decide to consider the proposals of CPB, NRP, APTS and PBS in the future, TRW urges the Commission to dismiss them as lacking any legal foundation. CPB and NPR offer no legal support whatsoever for their requests, and the sources cited by APTS and PBS simply do not give the Commission the authority to impose such requirements on MSS Above 1 GHz satellite systems.

APTS and PBS argue that, under Section 396 of the Communications Act, the Commission may require MSS Above 1 GHz system licensees to provide free

^{161/} Comments of APTS and PBS at 6. See also CPB Comments at 4 ("CPB is not yet able to offer the Commission information about the comparable costs of the means through which these educational services are provided today . . . [and] is even less able to anticipate the costs of other means of distributing such services.")

or low-cost access to space segment capacity to "public telecommunications services."^{162/} In fact, while the statute provides that "it is in the public interest to encourage the growth and development of public radio and television broadcasting"^{163/} and "of nonbroadcast telecommunications technologies for the delivery of public telecommunications services,"^{164/} neither provision authorizes the Commission to require any licensee to foster such services for free or at reduced rates.^{165/} Under Section 396(h)(1), common carriers are permitted to offer "free or reduced rate communications interconnection services for public television or radio services," but the Commission is nowhere authorized to impose such a requirement. Furthermore, Section 396(h)(1) applies only to common carriers. As MSS Above 1 GHz satellite system licensees themselves will not provide space segment capacity to service providers on a common carrier basis, there is no legal basis for the imposition

^{162/} See APTS & PBS Comments at 6-10 (citing 47 U.S.C. § 396). "Public telecommunications services" are defined in the Act as "noncommercial educational and cultural radio and television programs, and related noncommercial instructional or informational material that may be transmitted by means of electronic communications." 47 U.S.C. § 397(14).

^{163/} 47 U.S.C. § 396(a)(1).

^{164/} 47 U.S.C. § 396(a)(2).

^{165/} It is TRW's understanding that PBS and similar public telecommunications services do not receive free transmission of video or radio communications on commercial FSS satellites.

of a requirement that MSS Above 1 GHz satellite system licensees provide public service organizations with satellite capacity at free or reduced rates.^{166/}

4. The Commission Must Not Allow Service Providers To Set The Terms Of Their Commercial Transactions With MSS Above 1 GHz Satellite System Licensees.

Only one commenter, Mobile Datacom Corporation ("MDC"), requested that the Commission require MSS Above 1 GHz systems to provide space segment capacity at reduced rates to certain service providers.^{167/} In particular, MDC seeks requirements that "the LEO operator or operators" provide service to MDC at "reasonable and nondiscriminatory rates," and that such operators "make 'bulk capacity' space segment available for resale on reasonable terms and conditions,

^{166/} The legislative history of Section 396 provided by APTS and PBS, and the various other statutes and Commission decisions they cite, are no more supportive of their arguments. See APTS & PBS Comments at 7-11. At most, these sources suggest that the Commission may seek to ensure that adequate capacity is available for the transmission of public service programming. As TRW has already demonstrated, the vigorous competition in the MSS Above 1 GHz field will assure that sufficient capacity is available. In this regard, it must also be remembered that CPB, PBS, APTS and PBS all either represent or are themselves prospective end users of MSS Above 1 GHz service, and will therefore in all likelihood have no direct business relations with satellite system licensees. Instead, they will purchase or acquire their service from common carrier service providers, and should therefore apply to such providers, if anyone, for the preferential treatment they seek. If the Commission considers such requests for preferential treatment at all, therefore, it should do so in the context of a separate rulemaking proceeding in which all mobile services are considered together.

^{167/} See MDC Comments at 13-14.

including increments suitable for data and positioning services."^{168/} MDC offers no legal authority or policy basis to support its outrageous and self-serving demand that it be given a free ride.

TRW urges the Commission also to recognize that opening the door to requests such as that of MDC would unreasonably intrude on the development and operation of the MSS Above 1 GHz marketplace. MDC's argument is a thinly veiled attempt to dictate to MSS Above 1 GHz system licensees the terms and conditions under which MDC would buy space segment capacity. MSS Above 1 GHz system operators are entitled to earn a fair return on their investments in their systems, and should not be prevented from charging their customers fair market rates or packaging the capacity they will sell or lease as they see fit. The grant of requests such as that of MDC would be inappropriate in any scenario, but more so in a nascent competitive market, and would only encourage more of the same -- ultimately placing an untenable economic burden on MSS Above 1 GHz systems.

^{168/} See id.

B. THE COMMISSION MUST REJECT ALL PROPOSALS TO ALLOW REPLACEMENT SATELLITES TO BE ANYTHING OTHER THAN TECHNICALLY IDENTICAL TO INITIALLY AUTHORIZED SPACECRAFT, OR TO ALLOW SPARE SATELLITES TO OPERATE IN NON-EMERGENCY ROLES.

1. The "Technically Identical" Rule For Replacement Spacecraft Is Essential To The Orderly Administration Of The MSS Above 1 GHz Service; TRW Could Support An Expedited Application Procedure For Minor Modifications To System Licenses.

In its Comments, TRW supported the Commission's proposal that each replacement satellite placed into operation during a license term must be "'technically identical' to all other system space stations," noting that this requirement will prevent otherwise inevitable fraternal disputes as to whether minor and not-so-minor adjustments in spacecraft design may have an impact on the interference environment. See TRW Comments at 170. All four of the other non-geostationary MSS Above 1 GHz system applicants urged the Commission to moderate its technical identity requirement to permit functionally equivalent replacement spacecraft to be launched. See Constellation Comments at 61-62; Ellipsat Comments at 47; LQP Comments at 105-106; Motorola Comments at 69. Despite the seemingly strong sentiment for a moderation of the proposed standard, TRW urges the Commission to adhere to its initial proposal.

The supporters of a relaxation of the "technically equivalent" standard assert that licensees should be allowed to improve the efficiency of their systems

without facing unnecessary regulatory burdens. See, e.g., Motorola Comments at 69-70. They also contend that licensees should be accorded greater flexibility to construct replacement satellites that incorporate technological advances during the license term. See, e.g., Ellipsat Comments at 47. TRW has no quarrel with either objective. However, as an MSS operator with satellites that will have design lifetimes of between 10 and 15 years (as opposed to the 5 to 7 year design lifetimes of the other non-geostationary applicants), TRW stands in a position to be significantly harmed by changes to first generation spacecraft that are made in replacement satellites, and is likely to have to spend significant time and resources responding to licensees' claims that changes in replacement satellites over first generation spacecraft do not alter the interference environment. And it is noteworthy that the Commission rejected a similar call for an "operationally equivalent" standard for the NVNG MSS service.^{169/}

It is to be expected that the sharing conditions for the various MSS Above 1 GHz systems will be intensely negotiated and closely scrutinized by all parties. As more systems come on line, the picture will become increasingly complex. While it is inevitable that licensees will seek to modify aspects of their initial spacecraft as future generations are manufactured to replace them during the initial ten-year license term, it is also incumbent upon these licensees to demonstrate

^{169/} See NVNG MSS Report and Order, 8 FCC Rcd at 8452.

that the replacement satellites will conform meticulously to the multilateral coordination and sharing agreements that apply to the licensed spacecraft.

With a standard that requires "technical identity" for replacement spacecraft in order to have them fall within the system's blanket license, all the other systems have to do is to show that there is a difference between the operating characteristics or design of authorized and replacement spacecraft, and the burden will fall upon the operator to defend its replacement spacecraft. However, with the employment of a "functional equivalence" or other such standard whereby licensees merely certify that no new interference will be created with its replacement spacecraft, the burden shifts to other licensees to demonstrate that the replacement spacecraft is materially non-conforming. Under this approach, noncompliant spacecraft will be placed into orbit before the discrepancy can be discovered -- at which point the licensee would argue that it was too late to alter the design. For a licensee such as TRW, whose first generation spacecraft should last until well into the second license term, this poses an undesirable burden, and one that presents an intolerable risk that the interference environment it negotiates with its co-licensees at the outset will not be maintained throughout the life of its spacecraft.

TRW suggests that, in lieu of the automatic certification process contemplated by several applicants, the Commission could adopt a streamlined modification of license procedure for minor modifications to system licenses. Under

this procedure, licensees desiring to make changes in replacement spacecraft that are asserted not to alter the interference environment or abridge coordination agreements would file minor modification applications (that would be placed on public notice, but not be subject to competing applications). All interested parties would have an opportunity to assess the impact of the proposed changes, and the Commission would issue its decision on an expedited basis. All regulatory burdens would thus both be minimized and placed on the proper parties.^{170/} Both LQP and Ellipsat appear to indicate that such an approach would be acceptable to them. See LQP Comments at 106; Ellipsat Comments at 47.

2. The Commission Should Not Allow In-Orbit Spare Satellites To Be Operated As Regular Components Of An MSS Above 1 GHz Constellation.

LQP proposes in its comments that MSS Above 1 GHz licensees be granted the authority to operate in-orbit spare satellites. See LQP Comments at 104. It asserts that allowing such operation would not increase the capacity of a CDMA system, but could provide useful path diversity and thereby improve reliability and

^{170/} In this respect, TRW does not understand why LQP is objecting to the Commission's proposal to require MSS Above 1 GHz system licensees to certify the technical identity of replacements for spacecraft that are lost on launch. See LQP Comments at 103. This does not seem to pose an inordinate burden on licensees, yet it does contribute meaningfully both to the orderliness of the MSS Above 1 GHz service and the understanding that only compliant spacecraft will be launched.

service to the public. It proposes that its use of spares would be conditioned on compliance with PFD and e.i.r.p. limits, and with coordination parameters. Id.

TRW is somewhat confused by LQP's request. It generally is of the view, however, that a satellite that is used to provide regular service is not, by definition, a "spare" satellite. Thus, if LQP or any other applicant intends to operate spare spacecraft for uses not typically associated with spare spacecraft (i.e., regular commercial operations), it should request authority to amend its application to increase the number of operational spacecraft. Only in this way will all other applicants and licensees in the service know for sure what the operational plans are, and have an opportunity formally to evaluate the accuracy of any claims that rules and coordination agreements are being complied with. TRW therefore opposes this aspect of LQP's comments, and urges the Commission not to permit spare in-orbit satellites to be operated in non-emergency situations.

C. THE COMMISSION SHOULD NOT MODIFY ITS PROPOSALS REGARDING THE TIMING OF MSS ABOVE 1 GHZ SYSTEM RENEWAL APPLICATIONS.

Both Constellation and LQP make proposals that would accelerate the time for the filing of blanket license renewal applications for MSS Above 1 GHz systems. Constellation proposes an addendum to Proposed Section 25.120(e) that would permit the filing of a renewal application earlier than the current seventh-year

window, if needed in response to a cut-off notice of a potentially mutually exclusive application. See Constellation Comments at 64. LQP seeks to move the renewal window to the end of the fifth year of the ten-year license term, in order to enable licensees to make technical modifications to first generation spacecraft in the course of renewal applications. See LQP Comments at 114-115. TRW believes that both proposals are unnecessary, and should not be adopted.^{171/}

With respect first to Constellation's proposal, there is no condition under which a new or modified MSS Above 1 GHz system application that is mutually exclusive with an existing MSS Above 1 GHz system's license should ever be accepted for filing and placed on a cut-off notice -- whether or not such an application is filed as a challenge to an earlier MSS Above 1 GHz system renewal application. A new system applicant that fails to demonstrate its compatibility with a licensed system will be subject to summary dismissal.^{172/} Thus, a new applicant whose proposed system is mutually exclusive with a licensed system is not basically qualified. The same would be true with respect to a new entrant that, in response to a public notice issued in the year 2004 announcing the filing of one MSS Above 1 GHz system

^{171/} TRW does note, however, that LQP and Ellipsat both called for adoption of a renewal expectancy for MSS Above 1 GHz system licensees. See LQP Comments at 115 n.65; Ellipsat Comments at 47. These comments echo TRW's call for a renewal expectancy. See TRW Comments at 171-173 & n.278.

^{172/} Proposed Section 25.143(b)(2) requires MSS Above 1 GHz space station applicants to demonstrate that the operations of their proposed systems "will not cause unacceptable interference to other authorized users of the spectrum."

renewal application, files an application that is mutually exclusive not only to the renewal application, but also to a licensed MSS Above 1 GHz system that is not due to file its renewal application until 2007. The same would also be true for an existing licensee that filed a modification of license application that was mutually exclusive with another licensed system.

LQP's proposal is unnecessary because there is no required nexus between renewal applications and modification of license applications. If a licensee seeks to make any changes, minor or major, to its spacecraft design, it is free to do so at any time during a license term. It need not await the time for the filing of a renewal application.^{173/}

^{173/} TRW notes that there is a major flaw in LQP's proposal to accelerate the renewal application deadline. If the LQP second generation system also has a five-year design life, it would be filing its application to replace those satellites just as the second ten-year license term was beginning, and would thus have to replace the second generation with a new generation of technically identical satellites before it had its next renewal/modification window in year five of the second license term. LQP appears to be advocating a license term for MSS Above 1 GHz systems that does not exceed the design life of the satellites or ten years, whichever is shorter. While TRW would not oppose such a proposal, it cannot believe that this is what LQP intends.

D. THE COMMISSION SHOULD NOT ADD ADDITIONAL MILESTONES OR MODIFY ITS TRADITIONAL DEFINITION OF THE COMMENCEMENT OF SATELLITE CONSTRUCTION.

Although all of the MSS Above 1 GHz applicants generally supported the Commission's implementation milestone proposals (see NPRM, 9 FCC Rcd 1136 (¶ 84)), several commenters -- including TRW -- advanced proposals regarding certain aspects of the construction schedule. Motorola, for example, following through on a proposal it made in conjunction with its comments on the Commission's proposed global coverage capability standard, suggested that the Commission adopt a milestone that specifies that within six years of the commencement of the space segment blanket license term, each licensee must arrange for the establishment of "ground segment infrastructure in countries representing at least 75 percent of the world's population and surface area" Motorola Comments at 69. LQP proposed that the Commission make the definition of the term "commencement of construction" more meaningful, and would add an additional milestone for system operation. LQP Comments at 109-111. Ellipsat urged the Commission to instill some flexibility into its milestone program in order to allow licensees to construct their systems in stages. Ellipsat Comments at 48. TRW opposes the suggestions made by both Motorola and LQP on the milestones, but believes that there may be some merit in the policy points underlying Ellipsat's comments.

1. There Is No Need For The Ground Infrastructure Milestone Proposed By Motorola.

With respect first to Motorola's proposal, TRW has shown above that Motorola's attempt to include ground infrastructure in the global coverage capability analysis is a bad idea. See Section I.A.2.c, supra. Global coverage is a design capability to be demonstrated in a system application; it is not a service requirement. In any event, the requested milestone is fundamentally at odds with the applicants' conception of the MSS Above 1 GHz as a service whereby satellite system operators will make space segment capacity available in bulk to service providers around the world (who would then resell it to the customers they had identified or developed).

The primary objective of system operators is to get into place space segment that is capable of being accessed from anywhere in the world, and this objective is wholly consistent with the Commission's proposed requirement that applicants for MSS Above 1 GHz systems demonstrate the capability to provide global and U.S. coverage in order to be technically qualified. The pace at which the ground segment infrastructure will develop will in large part depend on the market that is cultivated by the MSS Above 1 GHz systems in the post-authorization environment. The Commission should be loathe to revoke the license of an MSS Above 1 GHz space segment operator that has established a billion dollar satellite system merely because it is unable to find a sufficient number of reliable co-venturers to bring earth stations on line in a sufficient portion of the world to bring coverage to the specified

level within six years after the first satellite is launched. In addition, the Motorola suggestion would also seem to bear upon an applicant's financial qualifications, far beyond what the Commission's Domsat standard intended.

Motorola's request for a ground-segment milestone is unnecessary, potentially punitive, and offensive to the notion that the MSS Above 1 GHz service will be a flexible, market-driven service. The proposal should be rejected.

2. The Commission Should Retain Its Traditional, Objective Definition Of "Commencement Of Construction" For Use In Determining Compliance With Implementation Milestones.

LQP's proposed re-definition of the term "commencement of construction" -- the test for determining compliance with milestones that occur one and three years after grant of MSS Above 1 GHz system authorizations (see NPRM, 9 FCC Rcd at 1136 (¶ 84)) -- is in conflict with the Commission's premise that implementation milestones should be unambiguous and basically self-effectuating. Whereas the current proposal specifies that construction of a satellite will have commenced once the permittee executes a non-contingent construction contract (id. at 1136-37 (¶ 85)),^{174/} LQP would require permittees to demonstrate such "events" as preliminary satellite design review, critical satellite design review, placement of

^{174/} TRW proposed a slight addendum to this provision in its own Comments, to cover situations where the permittee is also the manufacturer of the authorized spacecraft. See TRW Comments at 180.

orders for high reliability parts, and actual expenditures toward construction. LQP Comments at 111.

TRW believes that LQP's proposal will unduly and unnecessarily complicate the enforcement of the Commission's milestone program. Besides setting the Commission afloat in a sea of unwanted paperwork, LQP's proposal would engender issues about the confidentiality of information to be submitted, and the objectivity of the same. A construction contract for one applicant could call for the front loading of progress payments, while the contract for another could defer most substantial payments until after the system is operational. How LQP would have the Commission rely on "actual expenditures toward construction" in the two instances, and what conclusions it would have the Commission draw in each case, is unknown. Under the current formulation, however, each contract, if non-contingent, would suffice, making the inquiry relatively simple and much less intrusive.

Milestones should be objective, easily verifiable, and free of unnecessary regulatory burdens. LQP's proposal for intensification of the commencement of construction milestone fails on all three criteria. Of course, if a permittee that manages to squeak by with a non-contingent contract in one year really is not prepared to follow through, its weakness will be exposed upon the arrival of the subsequent

milestone deadline. Thus, the current system is designed not to be fooled for too long. LQP's proposal should be rejected.^{175/}

3. The Commission Need Not Modify Its Milestone Proposal For Placement Of Entire Constellations Into Operation.

With respect to LQP's proposed addition of a milestone whereby at a point three years into an MSS Above 1 GHz space station license term (or approximately seven years after construction permit grant), "each system should be required to have completed placing its proposed constellation into operation . . ." (see LQP Comments at 110), TRW believes that LQP has misread the NPRM. LQP is under the misapprehension that "no milestone has been specified for launch and operation of the entire system" Id. at 109. It asserts that as a result of this alleged oversight, there is no fixed point at which the Commission may revoke a system license for failing to complete their systems. Id. at 109-110.

In actuality, the Commission has proposed to require as a condition of each MSS Above 1 GHz construction permit that "the entire system must be launched and operational within six years of grant." NPRM, 9 FCC Rcd 1136 (¶ 84).

Assuming that this provision is what LQP is seeking, LQP's more recent proposal

^{175/} Motorola also indicated in its comments that it too intended to propose a redefinition of the term "commencement of construction." See Motorola Comments at 68. TRW, however, was unable to find a proposed redefinition anywhere in Motorola's comments. To the extent Motorola intended to propose a strengthening of the milestone, TRW would oppose it for the same reasons it has identified above in response to LQP's proposal.

should be rejected as unnecessary (indeed, as LQP's proposal would require completion of the system within seven years of permit grant, it would constitute a relaxation of the milestone proposal LQP purports to seek to strengthen).

4. TRW Supports The Inclusion Of Some Flexibility To Modify Milestone Schedules Once Systems Actually Launch Satellites.

Ellipsat, while recognizing the importance of milestone schedules, urges the Commission to be somewhat flexible and not to lose sight of the fact that the initiation of "commercial service" is the ultimate objective. See Ellipsat Comments at 48-49. In this respect, Ellipsat has indicated that it prefers to implement its proposed satellite system in phases, "to take advantage of technological advances and to respond to market demand." Id. Although its comments are not free of ambiguity on this point, it appears that Ellipsat is stating that while it would construct all of its authorized satellites within the six-year time frame, it may have difficulty meeting the milestone requirement that calls for commencement of construction of all authorized satellites within three years. Id. So far as TRW can tell, Ellipsat is asking the Commission to replace the three-year milestone calling for commencement of construction of all but the first two authorized satellites with a milestone that specifies that permittees will introduce "commercial service" within four years from construction permit grant. See id.

TRW, in its own comments, called for the Commission to allow any MSS Above 1 GHz permittee that has launched spacecraft sufficient to commence its system's license term a meaningful opportunity to obtain extension of the remaining milestones initially imposed in its authorization. See TRW Comments at 175-77. To the extent that Ellipsat's milestone proposal is in the spirit of TRW's proposal, TRW supports Ellipsat's request.^{176/}

CONCLUSION

As detailed above, although significant differences among the parties and other interested commenters remain evident in the initial comments filed in this proceeding, it is nonetheless clear that the Commission has provided the basis upon which a mutually acceptable sharing solution can be based. In order to achieve this objective, the Commission will need to separate the self-serving proposals advanced by some applicants from those suggestions that advance all of the applicants toward the goal of implementing competitive global MSS Above 1 GHz service. A pragmatic, reasoned review should permit the Commission to settle on an approach

^{176/} TRW notes, however, that it is unclear whether Ellipsat is supporting the Commission's proposal that all authorized spacecraft be launched and operational within six years of the grant of the MSS Above 1 GHz construction permit. TRW's full support for the Ellipsat proposals would depend upon further elaboration by Ellipsat in this area.

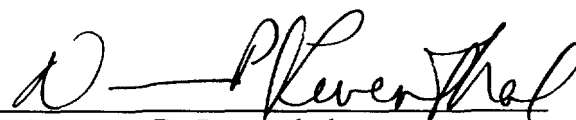
that is both even-handed from a regulatory standpoint and spectrum efficient from a technical standpoint.

Central to such a solution are the establishment of realistic technical qualification requirements that do not mandate the accommodation of particular service providers prior to the development of actual markets; and the adoption of sharing criteria that do not unduly favor one applicant or modulation scheme, and which take into account the near-term interservice sharing realities of the world-wide spectrum allocation for the MSS Above 1 GHz service. If these essential guidelines are followed in the formulation of final service rules, then each applicant should be

content with the outcome -- and the resulting opportunity to move forward with system implementation plans. The Commission will therefore be able to move swiftly to license systems in accordance with such rules.

Respectfully submitted,

TRW Inc.

By: 

Norman P. Leventhal

Raul R. Rodriguez

Stephen D. Baruch

David S. Keir

Walter P. Jacob

Leventhal, Senter & Lerman

2000 K Street, N.W.

Suite 600

Washington, D.C. 20006

(202) 429-8970

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Its Attorneys

ATTACHMENT A

TECHNICAL APPENDIX

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